The peculiar frons should readily separate this species from any of the few species that are allied to it in wing venation.

NEW EXOTIC NEUROPTEROID INSECTS.

By Nathan Banks, *Bureau of Entomology.*

Included below are a few miscellaneous descriptions of new exotic Neuropteroid insects which I have prepared from time to time while going over parts of my collection.

EPHEMERIDÆ.

Ephemera vedana n. sp.

Yellowish; pronotum with a dark stripe each side reaching back to above base of wings. On dorsum of abdomen, each segment has a pair of dark lines each side, the upper one the wider, except on the penultimate segment where there is one stripe each side, and a submedian pair within, this submedian pair of lines is often indicated on the other segments; last segment has a round black spot each side at base, and on some of the basal segments is a median dark spot. Venter with dark line each side, and the connection of venter and dorsum dark; setæ yellowish, their joinings dark; two dark dots each side on the upper plura. Tibia I dark at ends, femur reddish; basal joint of antennæ dark.

Fore wings hyaline, with a reddish tint along front, deepest in submarginal area and in the pterostigmatic area; cross-veins dark, longitudinal veins pale yellowish; hind wings with the cross-venation also dark; no spots on the wings. In several specimens the intercalary in front of the first anal is united to the anal near base.

The subimago has cloudy wings with dark cross-veins, in some specimens a black dot in the base of the median fork.

Expanse, 22 mm.

From Chapra, Bengal, India, February.

Abdominal marks are similar to those of *E. remensa* Eaton, but there is no trace of spots on the wings and the costal marks are different from that species.

Cloeon pulchella n. sp.

Female: Pale yellowish, abdomen rather darker. Wings hyaline, the costa faintly yellowish; about 25 cross-veins in the wings, and several of these are continuous across longitudinal veins, none near the margin, two or three in the pterostigma, widely separated, none before bulla; two intercalaries behind median, cubitus, and first anal, the posterior one of those behind median and cubitus is the longer.

Male: Thorax brown, basal segment of abdomen brown above, segments two

and three are pale, marked with brown, four and five white with brown hind margins, sixth white, with large brown spot each side behind, seventh broadly dark behind, eighth, ninth, and tenth wholly dark; venter hyaline, except last two segments dark. Fore femur dark at base, and a broad band at tip, and a dark line at tip of tibia.

Wings hyaline, a red-brown dot on inner end of great cross-vein, otherwise venation is hyaline, and on the same plan as that of the female.

Expanse, 8 mm.

From Chapra, Bengal, India. (Mackenzie).

HEMEROBIIDÆ.

Climacia basalis n. sp.

Body yellowish, head shining, antennae with two basal joints pale, rest black; thorax, legs, and abdomen pale. Wings pale, in base of fore-wing is an elongate curved, dark brown streak extending along radial sector from its origin out to first fork and then up on the upper branch for a short distance; stigma yellowish; gradates dark brown, almost bordered, the basal venation pale, beyond middle veins are dotted with brown, a faint brown cloud along basal anal margin; hind wings with brownish yellow venation, cross-veins darker. In fore wings about eleven costals before stigma, upper branch of radial sector connected three (or two) times to radius, first near base (sometimes lacking) second plainly before the stigma, and again under stigma; upper cubitus ends in five or six branches; the stigma of hind wing plainly swollen out.

Expanse, 8 mm.

From Bartica, British Guiana, December (Parish).

Climacia bimaculata n. sp.

Yellowish; a large black interantennal mark reaching above and below, head shining, three basal joints of antennae pale, rest black; thorax, abdomen and legs pale. Wings yellowish, venation yellow, outer gradates brownish, not very dark; each fore-wing with two large dark brown spots; basal transverse one over first fork of the radial sector and extending narrowly behind, second spot on costal and sub-costal area just before the stigma; stigma yellowish. Hind wings less yellowish, venation pale, a faint brown spot just before stigma. Fore-wings with about ten costal cross-veins before stigma, upper branch of radial sector connected three times to the radius, once near base, once at base of stigma, and under stigma, lower cubitus ends in four or five branches. Ovipositor long, slender, ends in a curved point.

Expanse, 8 mm.

From Bartica, British Guiana, December (Parish).

CHRYSOPIDÆ.

Chrysopa parishi n. sp.

Yellowish; a red mark under each eye, not reaching to mouth, a red mark back of each eye on the vertex and continued back on the anterior part (only) of the pronotum. Wings with very broad costal area, apex hardly acute, gradates black and margined, six in inner series, eight in outer row, inner series irregular, but nearer to radial sector than to the outer series, the marginal forks three times as long as broad, all veins rather stout, many faintly obscured, costals black at ends or almost wholly black, about 20 before stigma, three or four beyond end of the subcosta, radial cross-veins dark at upper end, divisory veinlet ends much beyond the cross-veins, second cubital cell as long as third, base of third oblique; pronotum but little longer than broad, narrowed in front.

Expanse, 29 mm.

From Bartica, British Guiana, December (Parish).

Chrysopa albatala n. sp.

Runs to *C. atala* Br. in Navas table, and very near to it, but differs at once in lacking a dark mark on cheeks and the palpi are marked with black. Antennae pale, basal joint with a dark line on outside; pronotum as broad as long, barely broader behind. Wings rather short, hardly acute at tips, with but few veins, about sixteen costals before stigma, four cross-veins behind stigma; gradates with four inner series and six in outer series, inner series nearer to the outer than to the radial sector; marginal forks about twice as long as broad; divisory vein ends at or a little beyond the cross-vein; third cubital equal to second, latter narrowed at tip and the third at base, more than usual.

Expanse 21 to 23 mm.

From Bartica, British Guiana, December (Parish).

Leucochrysa nigrovaria Walker.

Pale yellowish, a broad dark brown band under base of antennae from eye to eye, the lobe of vertex with a curved dark line in front; palpi unmarked; antennæ pale, first joint with an oblique, rather broad dark brown stripe above, second joint dark brown, next four or five joints infuscated within; margin of pronotum narrowly dark, a black spot on each lateral lobe of the mesothorax, and another near base of the fore wing, metathorax with dark spot above base of hind wings, third and fifth abdominal segments marked with black. Prothorax narrowed in front, a little broader than long. Wings with green venation; origin of radial sector, base of the divisory veinlet, outer gradates, ends of radial cross-veins and a few others dark; in hind wings venation almost wholly green. Stigma in both pairs dark in base. Seven or eight gradates in each series, inner series not nearer outer than to radial sector; marginal forks three times as long as broad; 21 costals before stigma in the fore wing.

Expanse 35 mm.

From Minero, Muzo, Colombia, 500 m. (Fassl.).

Chrysopa bolivari n. sp.

Similar to *C. caucana*. Antennae black, basal joints dull reddish, two dark spots on vertex, a black line from eye to mouth, and palpi marked with black; pronotum with two dark lines each side, one marginal, marginal dark stripe above base of wings on meso- and metathorax, and abdominal segment marked with dark on sides. Wings short, rounded at tip, few-veined, about fourteen costals, four cross-veins behind stigma, three or four gradates in each series, outer as near to inner series as to the margin, marginal forks not twice as long as broad, divisory ends beyond cross vein, second cubital as long as third, but not as wide. In basal part of wing several veins are thickened for a short distance, the radial sector between the first and second cross-veins to the median, the base of divisory cell, extending back on upper part of of second cubital cell, and also the cubital near base; these sections are about three times as broad as the rest of the vein, and furnished with minute spicules; these only in the fore-wing.

Expanse, 20 mm.

From San Antonio, Colombia, January, 2000 m. (Fassl.).

Chrysopa latithorax n. sp.

Greenish; a large, broad-bodied species; no dark marks except red line between antennæ; a whitish median stripe on thorax and abdomen, abdomen not dark on sides. Antennæ rather short and stout; prothorax fully twice as broad as long, much broader behind than in front. Wings rather slender, almost acute, rather densely veined, many costals, 9 to 11 gradates in each series, outer nearer to margin than to inner series; divisory veinlet ends at or barely before the cross-vein; third cubital shorter, but wider than second, its base very oblique; marginal forks about four times as long as broad; about eight cross-veins behind stigma, and three or four beyond end of the subcosta; radial sector dark at origin and out for some distance; most of the cross-veins dark, at least in part, and marginal forkings dark; in all wings there is one or more accessory gradate veinlets.

Expanse, 32 mm.

From Mendoza, Argentine, (Haarup).

Chrysopa confraterna n. sp.

Runs to *C. nobregana* in Navas table, differs by having a dark brown mark under each eye, but not reaching to mouth. Pale yellowish, probably greenish alive; head rather long and narrow; palpi with dark tips; vertex slightly tumid; pronotum broader than long, scarcely broader behind, with a faint mark each side.

Wings moderately slender, not acute at tips, with green venation, slightly darkened on costal and radial cross-veins, and on some other veins; gradates dark, inner of seven, outer of eight veinlets, outer series nearer to margin

than to the inner series; stigma green; divisory ends beyond the cross-vein; third cubital rather longer than the second, and widened at tip; marginal forks hardly twice as long as broad.

Expanse, 22 mm.

From Chacra di Coris, Argentine, 26 February, 20 March.

MYRMELEONIDÆ.

Acanthaclisis subfasciatus n. sp.

Face below antennæ wholly pale yellowish, basal joint of antennæ also pale, a black mark between antennæ, above is a transverse pale band, the vertex dull blackish, with three black joints or a line, all with short white hair; palpi pale. Pronotum yellowish, a median stripe (broader and divided in front), a narrow stripe each side not reaching behind, and the sides (broadly behind), all black; thorax brownish, a black stripe each side above wings; abdomen dull black, with short white hair; thorax with long white hair, and shorter erect black bristles; femora mostly blackish, tibiæ yellowish, the front and middle ones black banded on outside, hind tibiæ with black tip; tarsi black, pale on first and base of fifth joints. Wings hyaline; with about four faint brown bands before stigma, the first one extending over fork of cubitus, these bands are most distinct on radius and cubitus; between the bands the wing is hyaline whitish and most of the venation also; a dark mark at stigma and a spot at union of cubitus and median, and spots all around outer edge, a faint mark at end of anal vein; the subcosta has short dark spots, and the radius long dark spaces, many cross-veins are black, and the line of bent veins also black. In hind-wings is a mark at stigma, and faint clouds along outer posterior margin and a faint mark over cubital fork. Wings moderately slender, about as in *A. conspurcatus*. In fore-wings about seventeen to twenty-four costals are simple, and about as many crossed; in hind-wings no costals crossed; in fore-wing seven cross-veins before radial sector, in hind-wings four such cross-veins, twelve branches to radial sector in each wing.

Expanse, 80 mm.

From Kuranda, Cairns, Queensland, Australia. (Dodd).

All the other described Australian species of this genus have the costals crossed to near base of wing, only six or eight being simple.

The *A. fulva* Petersen resembles a species in British Museum (and my collection) which bears a manuscript name of van der Weele's. This species however has narrow wings, all veins (or nearly all) are red-brown, the mesoscutellum has two yellow dots, and hind wings have a cloud along outer hind margin. It comes from West Australia. I would name it but the type should be in the British Museum.

Acanthaclisis subtendens Walk. appears to be a small specimen of *A. fundatus*, at least the venation is about the same.

Formicaleon brahmanicus n. sp.

Head pale yellowish, a dark line under each antenna, and a spot above each, a bicurved line across in front of the vertex and a T-shaped mark on each side, and two little spots behind; antennæ brownish, annulate with darker brown, palpi pale; pronotum pale, but not clear, a dark stripe along each outer margin from the transverse groove backward, and within is another lateral stripe each side slightly approximating behind; thorax pale, with many dark marks, one round each corner of the middle lobe, large geminate spot above each fore-wing, a streak reaching backward, leaving a very broad pale median area; pleura pale; abdomen pale, with a brown stripe each side, twice indented from above on each segment, segments three and four with a median and an apical spot (latter may be united to the side-stripes), fifth and following segments with the side-stripe broad and connected broadly at tip of segments; last few segments of venter dark; legs pale yellowish, with some black dots at base of the black bristles; mid and apical dark bands on tibiae I and II, tips of tarsal joints one to four black and a preapical band on last joint, this joint being nearly as long as all others together; spurs not much curved and as long as four segments, legs not very slender, femora thickened. Wings hyaline, longitudinal veins interrupted with dark spots, very faint on median vein, cross-veins often dark at ends; stigma very faint, a dark dot on the radius below stigma and one out near tip of wing, a spot between median and cubitus near their ends and one on cubital fork near margin; hind wings with many forks and veins in outer posterior part of wing embrowned, so as to form a dark streak subparallel to the outer fourth of the hind margin. Hind-wings longer than forewings, and a little more slender and very acute at tip, fore-wings also slender, and with acute tips, seven cross-veins in fore-wings before radius, eleven or twelve branches of radial sector, in fore-wings seven cross-veins between a cubital fork and anal, in hind-wing anal ends only a little beyond cubital fork, in fore-wings the vein up from end of anal soon runs back to the margin.

Expanse, 86 mm.

From Pusa, Bengal, 3 to 11 March, 17 June.

TRICHOPTERA.

Dinarthrodes niger n. sp.

Black, with rather reddish brown hair, legs brownish; antennæ with tips and base on outer side of joints white, leaving a triangular black portion on each joint; maxillary palpi erect, densely haired, the broad joint masking the face; basal joint of male antenna fully twice as long as vertex, very large, slightly concave beneath, above with two large erect processes; the basal one not as high as the other, concave within and from upper inner angle is a long slender process reaching over to the opposite antenna; second process rather beyond the middle, subconical. Legs slender, not densely haired, spurs, 2, 4–4. Fore-wings rather slender, apex roundedly truncate, forks

1, 2, and 5, discal cell nearly as long as pedicel. Ventral male appendage long, upcurved, with a slender apical piece, pale and bare.

Expanse, 19 mm.

From Batavia, Java.

PRELIMINARY REPORT OF THE FINDING OF A NEW WEEVIL ENEMY OF THE POTATO TUBER.

By E. R. Sasscer and W. Dwight Pierce, *Bureau of Entomology.*

On May 21 of the current year, a number of potato tubers (*Solanum tuberosum*) from the neighborhood of Huarochiri, Peru, were received by Mr. F. V. Coville and were inspected by one of the authors (E. R. S.) and Mr. H. L. Sanford in accordance with the regulations governing importation of nursery stock by the United States Department of Agriculture. This examination revealed the presence of weevil mines and also those of the potato-tuber moth (*Phthorimœa operculella* Zell.?).[1]

Material infested with larvae, pupae and adults, and collected by Mr. W. F. Wight for horticultural purposes was received from the following localities on May 24: Cuzco, Temuco, and Arequipa, Peru; Oruro, Bolivia; and Ancud or San Carlos and Castro Islands, Chili. In many instances injury occasioned by these weevils was quite noticeable. But a few of the tubers which superficially appeared to be sound, on being opened, were found to be infested with one, and sometimes two, larvae or adults.

Two adults were kept alive from May 24 to September 6. During this period they fed but little and then only on foliage of potato.

This species has been determined by one of the authors (W. D. P.) as *Rhigopsidius tucumanus* Heller,[2] a species originally described from Tucuman, Argentine. It belongs to the subfamily of weevils known as *Rhytirhininæ*, tribe *Rhytirhinini*. The nearest North American insects are the species of the genus *Thecesternus* in the tribe *Thecesternini* of the same subfamily. Nothing whatever is known of the habits of this latter tribe, and the habits of only one species in the *Rhytirhinini* have been indicated.

The specimens at hand may be described briefly as follows:

Length 9 mm., yellowish or purplish brown, with thickly matted vestiture of a cinerous shade mottled with black dots. Head concealed from above by prothorax and eyes, almost covered by the lateral prothoracic lobes. Beak moderately short, usually reposing in a deep pocket of the

[1] Determined by Mr. August Busck.

[2] Stett. Ent. Zeit., 1906, vol. 67, pp. 7–9, pl. I figs. 3, 3a, 3b.